RESPONSE TO COMMENTS February 18, 2005

Comments Received on EPA's Proposed Decision to Deny a Variance to the Hecla Lucky Friday Mine

EPA issued public notice of its proposed decision to deny the variance on August 19, 2004 and took comments from September 1, through September 30, 2004. EPA had prepared a Decision Document (proposed denial, August 12, 2004) which discussed, in detail, the basis for the proposed denial. This document was available for public review.

EPA received a total of 38 individual letters and/or e-mails. The majority of these (24 of the 38) expressed support for the proposed decision. Fourteen of the commenters were not supportive of the proposed decision.

Following are the comments received on EPA's proposed decision to deny a variance to water quality standards to Hecla, Lucky Friday Mine, and EPA's responses. Comments and responses are grouped according to the subject area of the comment. The individual comments under each subject area are identified with the commenter(s) by a number. A list of the commenters that correspond to each number is included in Table 1 at the end of this document.

In some cases, the exact phrasing of detailed comments is presented. In other cases, substantive portions were excerpted or summarized from the comment. Where more than one commenter submitted similar comments, a summary of the comment is followed by the list of the commenters (by number) that provided the comment. The Administrative Record files contain complete copies of each comment letter and are available for review at the Wallace Public Library, 415 River Street, Wallace Idaho as well the EPA Regional Office, 1200 Sixth Avenue, Seattle, Washington.

A. General Comments

<u>Comment #1</u> - Sixty five percent of the commenters were supportive of EPA's proposed decision to deny the request for a variance.

(commenters 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24)

The commenters stated in very general terms that they were supportive of EPA's proposed decision based on a variety on reasons which included the following:

- a) they believe that treatment to control and limit metals into surface waters is affordable for Hecla Lucky Friday
- b) they believe that protecting and enhancing water quality and ecological conditions and aquatic species is important in the South Fork Coeur d'Alene River
- c) they are concerned about pollution from past mining practices
- d) they believe that efforts should work towards reducing and eliminating pollution

in our waters

e) they believe Hecla Lucky Friday should meet its NPDES permit limits and not release additional metals into the River.

Response: EPA acknowledges the comments.

Comment #2 - Thirty five percent of the commenters were not supportive of EPA's proposed decision to deny the request for a variance. The commenters below did not provide information refuting EPA's analysis, nor did they provide specifics as to what in EPA's analysis they were disagreeing with. More generally, they simply disagreed with the proposed decision and provided an opinion related to why they disagreed. (commenters 25, 26, 27, 28, 29, 30, 31, 32, 35, 37, 38)

Commenters stated they were opposed to EPA's decision because they believe:

- a) Hecla should not have to spend more money on treatment because the additional removal of metals from Lucky Friday is not needed
- b) the amount of metals (zinc) discharged into the South Fork by Lucky Friday and Galena Mines is minute compared to what enters from other sources
- c) the financial impact to Hecla would be burdensome
- d) demanding additional improvements/treatment goes beyond reasonable and threatens the existence of the company
- e) There is concern that Hecla may close its Lucky Friday operation which would have adverse effects on the mining industry in the Silver Valley and also the economy of the community.

Response:

a) As required by the Clean Water Act (CWA), Lucky Friday is required to have an NPDES permit (the permit) which allows the facility to discharge effluent into surface waters. The permit establishes the level/concentration of metals that the facility is permitted to discharge (the permit limits). The permit limits were calculated based upon the State of Idaho's water quality criteria. The water quality criteria, established by the State of Idaho, are designed to ensure that aquatic life, and the necessary levels of water quality to protect that life are attained in the South Fork Coeur d'Alene River (the South Fork).

Because the current discharge from the Lucky Friday Mine exceeds the permit limits for certain metals, the mine is required to reduce their current discharge levels so as to be in compliance with the limits. Therefore additional treatment and removal of metals from the effluent is needed, required by law, and necessary in order for the Lucky Friday Mine to be in compliance with the implementing federal and state laws which provide for the protection of the water quality in the South Fork. The permit includes a compliance schedule that allows Hecla up to 5 years to meet the permit limits for cadmium, lead, mercury, and zinc.

b) EPA is aware of the fact that the contribution of metals from the Lucky Friday discharges is relatively small in comparison to other sources of metals to the surface waters of the Coeur d'Alene Basin. However, this does not alleviate the mine from having to meet requirements under the CWA and NPDES regulations. These regulations in part require the establishment of limits on dischargers which must be stringent enough to meet state water quality standards.(40 CFR 122.44(d))

When looking at the South Fork Coeur d'Alene River as a whole, EPA agrees that the discharges of metals from the permitted mines are a small percentage of the total load of metals in the river. However, when looking at discrete segments of the South Fork, individual sources of metals become significant. For example, the Final Remedial Investigation Report prepared by EPA's Superfund program identified the Lucky Friday Mine and Tailings Ponds as a major source area for metals above Mullan.

c), d), e)

EPA specifically evaluated and analyzed the financial impact to Hecla of having to install pollution controls (active metals treatment) in order to meet the NPDES permit limits for cadmium, lead, and zinc. That analysis showed that even with Hecla's estimated pollution control costs of five million dollars, Lucky Friday would produce a more than sufficient return to justify continuing in business. Therefore, EPA's analysis concluded that the pollution controls would not cause widespread social or economic impacts nor be such that it would cause the mine to be unprofitable and shut down. Further, based on recent information which Hecla has released publicly, the company is conducting exploration drilling adjacent to identified reserves, and expects to add additional reserves to the mine in 2005, increasing the known potential mineable ore (Hecla press release,"Hecla Releases Third Quarter Financial Results, Advances Exploration and Development Projects", November 4, 2004, Business Wire). Additionally the overall Lucky Friday unit's performance over the first nine months of 2004 continues to be very strong, reflecting the improved and higher price of metals. Based on this information, EPA does not believe that the concern that Hecla may shut down the Lucky Friday Mine is a legitimate concern at this time.

Lastly, the installation of the additional treatment (sulfide precipitation) as described by Hecla is not unreasonable. Sulfide precipitation is, in fact, a common and well proven treatment for the removal of metals which several mines have installed.

<u>Comment #3</u> - Request for a public hearing. (commenters 25, 38)

Response: Of the 38 letters and/or e-mails that EPA received, only 2 contained a request for

a public hearing. These individuals did not identify any specific need or basis for requesting a hearing. Based on a few individual requests, and the lack of a specific need, EPA determined there was insufficient interest to justify the resources needed to hold a public hearing. However, as an alternative to a public hearing, EPA contacted these individuals and offered each the opportunity to meet individually with EPA. They declined that offer.

B. Timing of EPA Response

Comment # 4 - EPA has taken over 3 ½ years to review and propose a decision on this request. This long period of indecision makes business planning extremely difficult. (commenters 34, 36,)

Response:

EPA acknowledges that it has taken a significant amount of time to process this particular variance. EPA believes the delay was justified based on a number of circumstances associated with the approval of the site-specific criteria (SSC) and Hecla's conditioning of their initial variance request to the SSC approval and the need to issue the NPDES permit for the Lucky Friday Mine. Nevertheless EPA does not believe that the delay has had any significant adverse effects on the Lucky Friday Mine operations.

On February 21, 2001, shortly before EPA was to issue the draft NPDES permit, Hecla Mining Company submitted to EPA a request for variances from water quality standards for lead and zinc for the Lucky Friday Mine. In the February 2001 letter and in their public comments on the 2001 draft permit, Hecla requested the variances until Idaho's SSC for lead and zinc were approved by EPA.

Hecla had stated that the variance was only being requested until the SSC for cadmium, lead and zinc were approved by EPA. EPA decided it was prudent to focus resources on the review of Idaho's SSC, rather than the variance request. This was based on our direct and early involvement in Idaho's development of the SSC and our confidence that the SSC were most likely approvable. Further, based on statements made by Hecla, EPA assumed that if the SSC were approved, it would not be necessary to further process the variance request (Letter from EPA to Hecla, Feb 3, 2003). Idaho DEQ provided EPA a complete submission on the SSC in December 2002. EPA spent considerable time and resources reviewing Idaho's submission of the SSC and approved these in February 2003. Again, EPA assumed that the approval of the SSC for cadmium, lead and zinc, and the implementation of these revised criteria into a second draft revised NPDES permit for Hecla Lucky Friday would replace Hecla's need for a variance for these metals.

EPA revised the Lucky Friday draft permit, incorporating recalculated effluent

limits for cadmium, lead and zinc which were based on the recently approved SSC. The revised draft permit was public noticed on January 6, 2003. The effluent limits in the 2003 revised draft permit based on the SSC allow higher levels of lead and zinc to be discharged than effluent limits in the 2001 draft permit which were based on the previous Idaho standards.

Even though the higher SSC-based limits were included in the permit, Hecla, in its comments on the 2003 revised draft NPDES permit, stated it wished to keep its variance request active. In response, EPA sent a letter to Hecla (dated June 9, 2003) requesting that Hecla formally renew their variance request since their original request was for variances for lead and zinc water quality criteria that were no longer effective. Hecla submitted additional information related to the variance request in a letter dated June 9, 2003. In a letter dated July 11, 2003, Hecla clarified that they were now requesting variances from the SSC for cadmium, lead and zinc and the mercury water quality criteria. Hecla subsequently withdrew its variance request for mercury in a September 15, 2003 letter.

Given this renewed request, EPA conducted a preliminary review of Hecla's claim that controls more stringent that those required by section 301(b) and 306 of the CWA would result in substantial and widespread economic and social impacts. As a result of EPA's review of the supporting documentation provided in Hecla's initial request, EPA determined that the information Hecla supplied was incomplete and requested additional financial and operating information from the company. Correspondence between EPA and Hecla, continued through a series of letters in 2003 and 2004 which provided the additional information which was necessary in order for EPA to evaluate and analyze Hecla's variance request based on an economic demonstration.

C. Comments Related to the Lucky Friday NPDES permit

<u>Comment # 5</u> - EPA violated their own regulations by issuing the permit prior to acting on the variance request. (commenter 34)

Response:

EPA disagrees with this statement. EPA did not violate any applicable regulations with respect to issuing Hecla Lucky Friday's NPDES permit. There are no regulations which require EPA to act on a water quality standards variance prior to issuing an NPDES permit.

The applicable federal regulations governing the procedures EPA follows in processing a variance request for water quality standards in Idaho can be found at 40 CFR Part 131.33(d)(4). These regulations state, in part, that an applicant shall submit a request to the Regional Administrator not later than the date the

applicant applies for an NPDES permit which would implement the variance, except that an application may be filed later if the need for the variance arose, or the data supporting the variance becomes available after the NPDES permit application is filed. The burden is on the applicant to demonstrate to EPA's satisfaction that the designated use is unattainable for any one of the six reasons specified in the regulations under 131.33(d)(3).

These regulations do not require EPA to act on the variance prior to issuing an NPDES permit. However since the permit is the vehicle for implementation of the variance, in most situations and where EPA had complete information from the applicant, EPA would strive to make a decision on a variance request prior to issuing a permit.

EPA determined that the best course of action with respect to the Hecla Lucky Friday Mine was to issue the permit first. EPA issued the Lucky Friday permit on August 12, 2003. EPA decided to issue the permit even though a decision had not been made on the variance for the following reasons:

- (1) The Lucky Friday permit was last issued in 1977 and expired in 1980. Because the permit was long overdue, it was an Agency priority to issue the permit. Furthermore, a complaint was filed against EPA for undue delay in failing to reissue the Lucky Friday NPDES permit for 22 years. See Idaho Conservation League et. al. v. EPA, (W.D. Wa., no.C02-2295Z, 2002). EPA issued the Lucky Friday permit on August 12, 2003, and Idaho Conservation League dismissed its claims on August 19, 2003.
- (2) EPA's preliminary review of the documentation indicated that the submission in support of a variance based on an economic showing was incomplete. EPA knew it would take a significant amount of time to review this in greater depth and to obtain the additional necessary information from Hecla. Because EPA did not want to further delay the issuance of the permit pending this review, EPA believed it was prudent to issue the permit while continuing our review and analysis of the variance request. This decision was based in part on the fact that if the Agency did grant a variance we could go back and modify the permit and include any alternate metals limits as well as any additional conditions for a variance.
- (3) The Lucky Friday permit contains a compliance schedule which provides the Mine with up to five years before having to come into compliance with the cadmium, lead, and zinc limits. EPA believed that this provided the facility with the necessary regulatory relief during the processing of the variance request.

<u>Comment # 6</u> - Hecla incorporated by reference their comments on the TMDL and the Lucky Friday draft permits. Hecla cited specific concerns with the permit, including the permit requirements for continuous flow monitoring, composite sampling, ambient water monitoring, a

best management practices plan, WET testing and instream bioassessment, measurement of total recoverable metals instead of dissolved, a seepage study, mercury monitoring, and the upper pH limit. Hecla also commented on EPA's reasonable potential procedures. (commenter 34)

Response:

EPA responded to Hecla's comments on the TMDL and the Lucky Friday draft permits in the Response to Comments documents that were prepared with issuance of the TMDL and permit decisions. The appropriate time to comment on the permit and the TMDL was during the comment periods applicable to those decisions. Decisions regarding the TMDL and the permit were made following the public comment periods. The State of Idaho's TMDL was approved in August 2000 and the permit was issued in August 2004).

The Administrative record for the NPDES permit and the TMDLS are now closed. Therefore, EPA will not respond again to specific comments related to the TMDL or the permit in this Response to Comments document. EPA directs Hecla to the administrative records for the TMDL and the permit.

D. Hecla believes that EPA's denial of the variance does not comply with the Clean Water Act

Hecla made three claims that were the basis for their request for a variance. EPA evaluated all three bases that Hecla asserted in their variance application. The burden is on the applicant to demonstrate to EPA's satisfaction that the designated use is unattainable for one of the reasons specified in 40CFR 131.33(d)(3). EPA denied Hecla's variance request because Hecla failed to make the necessary demonstrations that the aquatic life use in the South Fork Coeur d'Alene River was not attainable based on all three of the factors they claimed. Hecla's claims and information submitted to EPA were analyzed and evaluated in detail in EPA's Decision Document (proposed denial, August 12, 2004). During the comment period Hecla submitted no new information as to any of these claims. Their specific comments are addressed below.

E. The Basis for EPA's Denial is Unclear

Several of Hecla's comments were related to a perceived lack of clarity in EPA's Decision Document (proposed denial, August12, 2004) with respect to the basis for the Agency's denial of their request for a variance based on 131.33(d)(3)(iii) and (iv).

"...attaining the water quality standard is not feasible because:

(iii) human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or

(iv) dams, diversions, or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use."

The following are the specific comments related to the above issue:

Comment #7 - "It is not clear what the factual basis is for EPA's proposed denial of the variance. Is the denial premised upon the fact that the designated uses are currently supported in the South Fork immediately below the Lucky Friday discharge?" (commenter 34)

Response:

EPA's denial of Hecla's request for a variance based on factor (iii) is based on our determination that the cold water biota use is currently attained in the South Fork in the vicinity of the Lucky Friday discharge. In fact, Hecla agrees. In their comment letter, Hecla stated that the aquatic community of the South Fork above Wallace is healthy.

As described in the applicable regulations (40 CFR 131.33(d)) the requirements for obtaining a variance include a demonstration by the applicant that it is not feasible to attain the designated use for any of the six reasons provided in the regulations. One of the bases for Hecla's request for a variance is that the designated use of cold water biota in the South Fork is not attainable because human caused conditions and sources of pollution prevent the attainment of the cold water biota use and these impacts can not be remedied. In this specific case, Hecla needed to have demonstrated that it is not feasible to attain the cold water biota use in the South Fork because of mining impacts and that these mining impacts can not be remedied.

In our review of Hecla's submission, with respect to the "human caused conditions" claim, Hecla's argument was that waters in the South Fork Coeur d'Alene River are not attaining the cold water biota use because of mining impacts and that attaining the use can not be accomplished in 5 years.

First, Hecla incorrectly assumes that a showing of non-attainment is limited to 5 years. Neither EPA's guidance nor regulation on variance factors limits the time frame for demonstrating attainability.

Secondly, EPA reviewed the documentation which Hecla submitted in support of its claim and determined that their submission did not support the assertion that it was not feasible to attain the cold water biota use and that these conditions could not be remedied. In EPA's Decision Document (proposed denial, August 12, 2004) the Agency provided a discussion of our detailed review of the information

submitted by Hecla and additional relevant information.

In reviewing Hecla's submission, it was unclear to EPA whether Hecla's claim for a variance was based on the conditions in the vicinity of the facility's discharge or on the conditions in the Lower South Fork below Canyon Creek. Therefore, EPA analyzed Hecla's submission with respect to both scenarios.

EPA has divided its assessment of use attainment in the South Fork Coeur d'Alene into two parts. Because the water quality and ecological conditions of the South Fork are significantly different in these two areas, EPA has analyzed both the upper South Fork (in the vicinity of Hecla's discharge) and the lower South Fork (below Canyon Creek). EPA reviewed Hecla's submission as well as additional available biological and chemical data for the South Fork Coeur d'Alene River in order to assess whether the cold water biota use is "unattainable."

Upper South Fork

Based on EPA's review of the biological and chemical data for the upper South Fork, EPA determined that the cold water biota use is currently attainable as discussed in detail in the Decision Document in pages 8-13 (proposed denial, August 12, 2004). The data indicates that the ecological conditions in the upper South Fork are supportive of a cold water biota life use. There are self sustaining populations of fish and macroinvertebrates inhabiting the South Fork near Hecla's discharge, above Canyon Creek. Further, the chemical data indicate that water quality conditions are supportive of cold water aquatic species and have generally shown improvement over time.

In addition, implementation of the Interim Record of Decision (ROD) for the Coeur d'Alene Basin will provide for water quality improvements that will benefit the cold water aquatic species and ecological community in the upper South Fork (Decision Document, proposed denial, August 12, 2004 page 9).

Additionally, the discharge from the Lucky Friday Mine, which contributes to exceedances of the metals water quality criteria downstream from the mine, can be controlled via treatment. Institution of treatment controls necessary to assure compliance with its NPDES permits ensures that discharges from the Mine will not cause or contribute to water quality exceedances in the vicinity of the mine or in the lower South Fork and thus protects the cold water biota use.

Lastly, neither Hecla nor any of the other commenters provided EPA with any new or additional information during the comment period that would provide a basis to revise EPA's analysis and decision to deny the variance.

In conclusion, neither Hecla's submission nor public comment demonstrated that

the cold water biota use in the Upper South Fork is precluded by human caused conditions and pollution (i.e., the impacts from mining) and can not be remedied. In fact EPA's review of the available information supports the opposite conclusion, the cold water biota use is currently attained in the Upper South Fork. Therefore, granting a variance to Hecla is unwarranted because it would allow Hecla's discharge to violate site-specific water quality standards in the Upper South Fork where the cold water biota use is attained.

South Fork below Canyon Creek

EPA reviewed information submitted by Hecla as well as information in a number of publicly available technical reports which contained data and information regarding the ecological conditions of the South Fork below Canyon Creek (Decision Document, proposed denial, August 12, 2004 pages 8-14). EPA reviewed this information in order to determine whether the cold water biota use is attainable. The information reviewed clearly confirms that ecological conditions in this portion of the South Fork are impaired as a result of mining impacts. Information indicates that the physical in-stream habitat is of low quality and there are exceedances of the numeric water quality criteria for metals (i.e., cadmium, lead and zinc). Although fish and other aquatic life are present in this area of the South Fork, surveys indicate that the density and abundance of aquatic organisms are substantially reduced in comparison to appropriate reference streams. Information which Hecla submitted in support of its variance request substantiates this impairment.

That information, as EPA discussed in the Decision Document (proposed denial, August 12, 2004, pg. 9), also indicates that water quality has been improving over time and the biological conditions have also seen some recovery. Several of the documents include statements that further indicate that at the current time a limited cold water aquatic life use exists below Canyon Creek (Decision Document, proposed denial, August 12, 2004 pages 11 and 12). Again, EPA reviewed other information in addition to Hecla's submission (Decision Document, proposed denial August 12, 2004 pages 10 - 12). This information also substantiated the conclusion that the use is impaired in the lower South Fork.

Based on the information Hecla presented and other information obtained by EPA, the Agency concluded that the cold water biota use in the lower South Fork is present, although its condition is impaired. It is important to note that a determination of "use impairment" is not synonymous with a determination that the use is "not attainable" and that conditions can not be remedied.

Hecla's reliance on EPA's Interim ROD for the Coeur d'Alene Basin does not support Hecla's claim that the cold water biota use can not be attained. As discussed in EPA's Decision Document (proposed denial, August 12, 2004), EPA concluded that water quality and aquatic life conditions in the South Fork range

from excellent to poor. The remedies in the Interim ROD vary based on the range of conditions. In those areas where the mining impacts are severe and the conditions are poor it will likely take a significant number of years and the implementation of a number and variety of remedial activities and restoration actions until the goal of meeting the water quality standards are attained. In those areas where the mining impacts are less, its likely that water quality standards can be achieved sooner.

In summary, Hecla's submission provided information that supports the fact that cold water aquatic life is present in the lower South Fork even though impaired as a result of mining impacts. However, Hecla did not show how the information and studies they provided demonstrate that the cold water biota use is not attainable and that the mining impacts cannot be remedied. The regulations clearly state that the applicant must demonstrate that attaining the use is not feasible because human caused conditions prevent attainment and these conditions can not be remedied (40 CFR 131.33(d)). An adequate analysis of attainability would need to demonstrate that even with pollution controls in place as well as other means of controlling water quality impacts from mining, it is not possible to attain full support of the cold water biota use. Hecla failed to provide the necessary analysis of attainability.

Finally, even if the cold water biota use in the lower South Fork was unattainable, this would not justify allowing Hecla's discharge to exceed the site-specific water quality criteria in the upper South Fork where the cold water biota use is now attained.

<u>Comment # 8</u> - "EPA attempts to narrow the health of the South Fork to areas above the Lucky Friday discharges" (page 8)". (commenter 34)

Response:

EPA did not narrow its assessment of the health of the South Fork strictly to the area above the Lucky Friday discharges. As discussed in #7 above, EPA evaluated attaining the cold water biota use in the Upper South Fork, the area in the vicinity of the Lucky Friday discharge (both above and below the Mine) and the area of the South Fork below Canyon Creek. On page 8 of the Decision Document (proposed denial, August 12, 2004), EPA distinguished between the condition of impairment of the aquatic life in the South Fork below Canyon Creek and the "non-impairment" in the South Fork in the vicinity the Lucky Friday discharges.

<u>Comment # 9</u> - Commenter believed that EPA arbitrarily and unreasonably denied Hecla's request for a variance based on a finding that beneficial uses are currently supported in the South Fork above Wallace, without evaluating whether criteria can also be attained and the economic impacts to the Lucky Friday of complying with the effluent limits.

(commenter 34)

Response:

EPA's analysis included an assessment of whether or not the cold water biota use was attainable. Included in that assessment was an analysis of whether the metals criteria were being met currently in the Upper and Lower South Fork. We determined that the metals criteria are consistently being met above the Lucky Friday discharge, are often being met (although sometimes exceeded) in the vicinity just downstream from Lucky Friday and are most often not being met below Canyon Creek.

With respect to evaluating the economic impacts to the Lucky Friday of complying with the effluent limits, an economic analysis which evaluated whether there were substantial economic impacts to Hecla was performed. The economic analysis included an evaluation of whether the treatment Hecla identified as necessary in order to comply with the water quality based effluent limits in the permit would result in substantial and widespread economic and social impact. The results of EPA's economic evaluation indicated that the impact to Lucky Friday of installing appropriate treatment was not a substantial economic impact.

<u>Comment # 10</u> - Commenter believed EPA failed to evaluate the regulatory variance provision of both "human caused conditions" and "hydraulic modifications" thus rendering the provisions moot because if they are not applicable in this situation, there will be no situations where these provision apply. (commenter 34)

Response:

EPA did evaluate Hecla's request for a variance based on their assertion of uses not feasible to attain due to human caused conditions and also due to hydrologic modifications in the South Fork. As discussed above, as well as in the Decision Document (proposed denial, August 12, 2004), EPA carefully evaluated the information Hecla presented as well as other readily available information. EPA spent considerable time analyzing the data and information contained in numerous technical reports from 1993 through the present. EPA concluded that Hecla had not made the necessary demonstration as set forth in the applicable regulations. Therefore a variance was not justified based on Hecla's claims.

EPA is aware there are situations where use attainability analysis (UAA) claims have adequately demonstrated the factor - "not feasible to attain the use due to human caused conditions and/or hydrologic modifications". A UAA which Idaho Division of Environmental Quality (IDEQ) submitted for Blackbird and Westfork Blackbird Creek at the Blackbird Mine, which addressed these same factors as a variance in 131.10(g), adequately demonstrated these exact assertions, and EPA approved the use attainability analysis.

Comment # 11 - "If the basis for EPA denial is that the designated uses below Wallace on the

South Fork are attainable (although currently impaired) we believe that such a finding is arbitrary and contrary to the various studies cited in Hecla's request for variance. Lucky Friday's variance request was not a use attainability analysis, as we understood that such an analysis was not necessary."

(commenter 34)

Response:

EPA did not determine that the cold water biota use below Canyon Creek on the South Fork is attainable. EPA's denial of Hecla's request for a variance based on 40 CFR 131.33(d)(iii) is based on Hecla's failure to show that the cold water biota use is not feasible to attain and human caused conditions can not be remedied in both the upper and lower South Fork (Decision Document, proposed denial August 12, 2004, p.14).

EPA reviewed Hecla's claims and studies and responded to them with respect to the upper South Fork and the lower South Fork. In doing so, EPA determined that with respect to the lower South Fork (that part of the South Fork below Canyon Creek (which is also the same as the South Fork below Wallace) Hecla did not demonstrate in its submittal that the cold water biota use is unattainable, only that it is impaired below Canyon Creek. Hecla's statements with respect to the Interim ROD as well as the other documents which were submitted and cited, do not demonstrate that the cold water biota use below Wallace is not attainable, but simply that it will take considerable time and resources to attain the use at sometime in the future. EPA does not agree that this is a basis for concluding that "it is not feasible to attain the use." (Decision Document, proposed denial August 12, 2004)

EPA's analysis in the proposed denial showed that 1) technology for treatment is available and feasible to put in place at the Hecla Lucky Friday Mine, 2) remediation in the Coeur d'Alene Basin is progressing and 3) water quality and ecological conditions are improving which suggests that the cold water biota use is partially attained. These conclusions suggest that attaining the use and remedying the human caused conditions due to mining is possible in the South Fork. Hecla has not provided additional information since EPA's proposed denial that would refute these conclusions.

Even if Hecla had demonstrated that the cold water biota use is not attainable in the lower South Fork, this would not be a basis for EPA to grant a variance to Hecla Lucky Friday. As EPA discussed in comment #7 the cold water biota use is now attained in the upper South Fork and any relaxation of the effluent limits in the NPDES permit would allow the discharge to exceed the site-specific criteria which protect that use.

Hecla can not construct a case for a variance based on use attainment conditions in the lower South Fork because Lucky Friday's discharge is a relatively minor

contributor of the loading of cadmium, lead and zinc below Canyon Creek. EPA believes that the conditions below Canyon Creek (Wallace) have bearing on facilities which discharge to that part of the South Fork, or facilities which impact or are impacted by the use attainment issues in that area. EPA believes the water quality of the South Fork above Canyon Creek are most relevant in reviewing whether the requirements for a variance for Lucky Friday have been met.

As to Hecla's comment regarding UAA, EPA agrees that Hecla is not required to perform a UAA. However some of those factors to be considered for a UAA (40 CFR Part 131.10(g)) are the same as for a variance. 40 CFR 131.33(d). Therefore, the analyses required for either a variance or a use attainability analysis (UAA) are similar. EPA Guidance states that the variance procedures involve the same substantive and procedural requirements as removing a designated use (an UAA), but unlike use removal, variances are both discharger and pollutant specific, are time-limited and do not forego the currently designated use. (Water Quality Standards Handbook: Second Edition, 1994. pg. 5-12)

F. SAIC's Technical Feasibility Report

Hecla had several criticisms of the SAIC report (Technical Feasibility of Reducing Zinc, Lead, and Cadmium Levels in Mining Waste Waters From the Hecla Mining Company Lucky Friday Mine, SAIC, June 24, 2004). Hecla's comments are directed toward challenging the appropriateness of SAIC's selection of pollution control technology and the associated costs of treatment. However, Hecla's comments on the report do not provide a basis for EPA to revise its analysis of Hecla's variance request or EPA's decision to deny the variance. EPA's analysis considered both the treatment cost estimate in the SAIC report and Hecla's higher treatment cost estimate. EPA's analysis concluded that even Hecla's higher cost estimate was feasible and therefore would not result in substantial and widespread economic and social impact. EPA is responding to the comments as follows.

Comment # 12 - Hecla commented that the SAIC report was based on a previous 1998 SAIC report and that the report did not discuss any innovative technologies as available since their 1998 review.

(commenter 34)

Response:

SAIC did not need to review the use of innovative technologies, since SAIC identified that a more readily available technology exists (sulfide precipitation) that can meet the cadmium, lead, and zinc limits in the permit. In documents submitted to EPA, Hecla (Hecla Water Treatment report) and Hecla's contractor CENTRA also identified non-innovative precipitation technologies that can meet the permit limits.

<u>Comment # 13</u> - Hecla commented that the "Hydroxide Precipitation" and "Sulfide Precipitation" reviews are suspect without consideration of hydrodynamics and/or

hydrometallurgy for the water to be treated. Hecla commented that SAIC has completely misrepresented hydroxide precipitation without stating that bench scale and/or pilot testing will better demonstrate treatment efficiency. Hecla selected hydroxide precipitation technology. SAIC added additional technology without evaluation of the hydrodynamics associated with mixed-metal solutions being treated. (commenter 34)

Response:

In their report, SAIC acknowledged that estimates of metal removal by precipitation as hydroxides should be treated carefully "... because over simplification of theoretical solubility data can lead to errors of several orders of magnitude." (see last paragraph of "Hydroxide Precipitation" section of the SAIC report). The same could be said of estimates of metal removal based solely on the theoretical metal sulfide solubility curves. As discussed in response to the following comment, SAIC did not rely solely on theoretical metal solubility curves in identifying a treatment technology for the Lucky Friday wastewater.

EPA agrees that bench and pilot scale testing is important to determine wastewater specific treatment efficiencies. Regardless, as stated in the opening paragraph, EPA evaluated Hecla's variance request based on both the treatment train and costs identified by Hecla and as estimated by SAIC, and concluded that even Hecla's higher cost estimate was economically feasible and therefore therefore would not result in substantial and widespread economic and social impact.

<u>Comment # 14</u> - Hecla commented that SAIC's comparison of Red Dog and Lucky Friday is not appropriate since the facilities are very different (e.g., influent pH, influent metal concentrations, proposed effluent limits, process facility design, etc.). (commenter 34)

Response:

EPA agrees that there are differences in wastewater characteristics between Red Dog and Lucky Friday. SAIC used Red Dog as an example to show that sulfide co-precipitation technology could achieve limits similar to those in the Lucky Friday permit. This was only one factor that influenced SAIC's selection of sulfide co-precipitation as a reasonable treatment technology for the Lucky Friday wastewater. SAIC also considered theoretical solubility of metal sulfides, published reports of precipitation of metals via sulfides (see footnotes 5, 6, and 7 of the SAIC report), and information in the CENTRA report. The CENTRA report also identified sulfide co-precipitation as the treatment technology for the Lucky Friday wastewater.

<u>Comment # 15</u> - Hecla criticized some of the costs used in SAICs analysis, including the costs for: the lime storage and feed equipment, the coagulation/clarification equipment, the factors applied to calculate piping, electrical, instrumentation, and engineering and construction management.

(commenter 34)

Response:

EPA tasked SAIC to determine a treatment technology that could achieve the cadmium, lead, and zinc limits in the Lucky Friday permit and estimate the cost of treatment. SAIC estimated costs based on their engineering judgement and selected unit costs based on the CENTRA report, vendor quotes, and factors discussed in the SAIC report. SAIC estimated wastewater treatment capital and operating costs of \$3.97 million and \$311,000/year, respectively. Hecla estimated capital and operating costs of \$5.5 million and \$387,000. Regardless, as stated in the opening paragraph, EPA evaluated Hecla's variance request based on both Hecla's cost estimate and SAIC's cost estimate, and concluded that even Hecla's higher cost estimate was economically feasible and therefore would not result in substantial and widespread economic and social impact.

G. Superfund Record of Decision (ROD) and Natural Resource Damage Assessment

Comment # 16 - "In the Superfund context EPA understands that water quality standards are a goal and not the standard by which this interim ROD will be evaluated over the next 30 years. If it makes sense that the Superfund remedy first phase is expected to take 30 years without achieving water quality standards, it seems reasonable that a mere 5 year variance for the Lucky Friday Mine discharge also should make sense."

(commenter 36)

Response:

The comment that the water quality standards are a goal and not the standard which the Superfund Interim ROD will be evaluated over the next 30 years is correct. EPA also agrees that the remedies in the Interim ROD are expected take 30 years and that even after the implementation of the Interim ROD that in some areas of the Basin it is likely that the water quality standards will not be met. However, there are two important points to note - 1) in the vicinity where Hecla Lucky Friday discharges, the water quality criteria are being attained most of the time and the aquatic life community is generally in good condition, 2) regardless of the statements about the Interim ROD, any point source, (which includes those facilities with NPDES permits), established under the remedy (e.g., a water treatment facility or operating mine) would need to meet water quality standards (WQS) at the point of discharge. The Lucky Friday Mine is such a point source, and therefore, is expected to meet all applicable WQS, at this time; regardless of the fact that the implementation of the Interim ROD will take 30 years.

However, the compliance schedule and interim effluent limits provisions in the permit effectively provides Hecla with the same relief as a variance would, 5 years until the final effluent limits for certain metals would need to be met.

Comment # 17 - "...EPA contradicts the report of their own expert witness in the NRD lawsuit (Dudley W. Reiser - August 31, 1999). Reach 4 of the site pairings (South Fork Paired with

similar reach of the St. Regis reference stream) contains 4 separate sites, all of which are below Lucky Friday discharges. The Reiser report states that fish density "was significantly greater in the SF at site pairing 4."." (commenter 34)

Response:

EPA reviewed the Expert Report of Dudley W. Reiser, PH.D., August 31, 1999. EPA's summary of the conditions in the South Fork as discussed in EPA's Decision Document (proposed denial, August 12, 2004) are consistent with the conclusions and opinions of Dudley Reiser. His conclusions and opinions as summarized in that report are as follows (Expert Report of Dudley W. Reiser, Ph.D. (Aug. 31, 1999) (unpublished report in docket for UNITED STATES of America, Plaintiff v. Asarco Incorportated, et al. No. 96-10122-N-EJL and Case No. 91-9342-N-EJL, 1999 WL 33313132 (D.Idaho, Sept. 30, 1999, pages 6-1 through 6-2).

"Fish populations in the SFCDA River are influenced by anthropogenic factors including mining, metals toxicity, channelization. The degree to which each of these factors has impacted the populations varies spatially and in some cases temporally."

This conclusion is consistent with EPA's analysis. EPA concluded that the water quality condition and the health of aquatic species in the South Fork varies from the upper South Fork to the lower South Fork

"Wild trout populations in the SFCDA River below Canyon Creek is controlled primarily by high concentrations of zinc, cadmium and lead."

This conclusion is consistent with EPA' analysis. EPA concluded that fish populations are impaired in the South Fork below Canyon Creek.

"Wild trout populations in the SFCDA River above Canyon Creek are controlled more by physical habitat and channel alteration and basin scale factors than by elevated metals concentrations. The high abundance of wild trout in the South Fork above Canyon Creek, near Mullan, occurred in spite of the channel being extensively channelized and total and dissolved zinc concentrations exceeding the criteria. The concentrations of metals in the very upper most reaches (headwaters) of the SFCDA River were well below the water quality criteria for these metals."

EPA reviewed Reiser's work and concluded that it is consistent with EPA's conclusion that the cold water biota use is attained in the upper South Fork. Reiser's analysis found a high abundance of trout above Canyon Creek in spite of some elevated levels of zinc and channel modifications. In our review of the water quality data EPA acknowledged there were some exceedances of cadmium

and zinc below the Lucky Friday discharges. (Decision Document proposed denial August 12, 2004 p.12).

Resier's conclusions do not contradict EPA's analysis and conclusions in the Decision Document (proposed denial August 12, 2004).

Hecla's statement that Reiser measured greater fish density at site pairing 4 (below Hecla Lucky Friday) in the South Fork compared with the reference site for the St. Regis River is correct. However, EPA does not find this statement supportive of Hecla's claim that the cold water biota use is not attainable. In fact, Reiser's statements and findings regarding site pairing 4 only further support EPA's conclusion that resident fish populations exist in the South Fork below the Lucky Friday discharges and therefore the cold water biota use is attainable.

H. EPA should Re-examine the Proposal to Deny the Variance

<u>Comment # 18</u> - Lucky Friday is entitled to some regulatory relief under the variance process (commenter 34)

Response:

As stated previously, the applicable water quality standards regulations require an applicant to provide information to EPA which would demonstrate that a variance is warranted for any of one of the six conditions defined in the regulations (40 CFR at 131.10(g)). A facility is not entitled to regulatory relief under the variance process without having provided that demonstration. EPA determined that Hecla had not made the required demonstration.

However, Lucky Friday Mine was provided regulatory relief from the final effluent limitations in the NPDES permit via a compliance schedule and interim limits. In accordance with the State of Idaho's 401 certification, EPA incorporated interim effluent limits for cadmium, lead, zinc, and mercury that are in effect during the five year compliance schedule (note that these are interim "limits" not "standards"). These interim limits are based on the current performance of the facility (current discharge levels). As discussed in EPA's Response to Comments on the Lucky Friday NPDES permit, IDEQ authorized a five year compliance schedule for cadmium (outfall 001 only), lead, mercury, and zinc in their final CWA Section 401 certification. The compliance schedule requirements in the certification were included in Part I.A.4. of the final permit. In summary, Lucky Friday has, in essence, been provided 5 years (from the date of permit issuance) of relief from the regulatory requirement of meeting the final effluent limits for these metals.

<u>Comment # 19</u> - In order for the Lucky Friday to maintain continued economic viability it is critical for EPA to exercise additional flexibility on certain permit requirements which would be less costly to the Lucky Friday. EPA should consider these permit issues again on deciding

whether to grant Helca's variance request. (commenter 34)

Response:

EPA conducted a detailed review of financial information on Hecla and Lucky Friday Mine. On the basis of this review, EPA concluded that installing available treatment technologies to meet its permit limits would be unlikely to substantially alter its activities or planned investments at the Lucky Friday Mine. Therefore, EPA found that the permit requirements would not result in substantial and widespread impacts, and a variance is not warranted.

EPA establishes permit limits based on attaining water quality standards, but does not specify or require the mix of controls and treatment technologies needed to achieve those limits. Thus, this gives Hecla maximum flexibility to install the least costly mix of controls and treatment technologies needed to meet its permit limits.

I. Economic Considerations

<u>Comment #20</u> - EPA chose to wait until the first period of reasonable silver prices to issue its decision and based that decision on the recently improved silver price. (commenters 34,36)

Response:

This conclusion by Hecla and Coeur is based on an incorrect interpretation of EPA's assumptions underlying its analysis. The EPA analysis did not rely on "one year of silver prices" or the "prices of the last few months."

EPA's analysis was based on information provided by Hecla and concluded that the historical results and figures were not an appropriate basis for evaluating the Lucky Friday situation. EPA also concluded that the appropriate basis for its analysis was to reference Hecla's forward-looking analysis, which includes forecasted prices for the period 2004 through 2011. Hecla's forward-looking analysis was conducted in late 2003 to determine whether it should proceed with constructing a 5500 foot drift at the 5900 level of the Lucky Friday Mine, a major new project essential to Lucky Friday's continued viability and would cost approximately \$8 million. Hecla announced its decision to go forward with this project in December 2003, a decision based on the company's pricing assumptions for 2004 to 2011. Thus, EPA's use of Hecla's pricing assumptions reflected the company's analytical approach.

EPA analyzed the estimated costs of water pollution controls necessary to meet the water quality standard based permit using Hecla's estimated costs and forecasted prices, and concluded the impact of the water pollution control project would not be sufficient to deter Hecla's investment in the new drift. <u>Comment #21</u> - EPA's numerous recent requests for information, made more than two years after Hecla-Lucky Friday Mine filed its request, were merely efforts to gain data to support a decision already made. (commenter 34)

Response:

When making its decision on a variance request, EPA first waits until all of the relevant analyses are completed, including the substantial impacts (i.e., financial) analysis. In the process of conducting this type of analysis it is important that EPA is aware of the entity's current and if available, future financial and operating conditions. Though the agency may already have certain information previously provided by the applicant, that information may have to be updated. For example, EPA may request clarification on information already provided by the applicant, or based on information already provided to EPA the agency may learn about a related issue and requires additional information from the applicant to better understand that issue. So while EPA does request information that ultimately can be used as a basis for its decision, no decision can be made without first obtaining that information.

In this case, Hecla-Lucky Friday Mine's initial submission raised a number of questions and issues that required a series of correspondence between EPA and Hecla. EPA found that some of the information provided by Hecla required clarification, including: questions regarding the accuracy of certain of Hecla's calculations, the basis for Hecla's calculations, and the specification from Hecla as to which information it was requesting confidentiality for. As time passed, EPA was obliged to take into account the evolving financial situation for the Lucky Friday Mine and Hecla, and requested updates to assure that EPA's decision was based on up-to-date information.

<u>Comment #22</u> - EPA did not feel obligated to review any further the potential impacts upon the community.

(commenters 31, 34, 36)

Response: EPA's Interim Guidance (section 3) indicates that,

"If the analysis shows that the entity will not incur any substantial impacts due to the cost of pollution control (e.g., there will be no significant changes in the factory's level of operations nor profit), then the analysis is completed."

EPA has concluded, based particularly on Hecla's forward-looking plans for the operation of the mine, that the pollution control costs will not cause any significant change in the Mine's level of operations. In arriving at its decision, EPA focused on Lucky Friday's expansion program (i.e., the 5900 level drift project), including an increase in production to 100 percent capacity; the

significantly improved and continuing level of silver prices which directly relates to improved revenues for the Mine; and the expected increase in the Mine's property value.

In addition, EPA takes particular notice of Hecla's optimistic and positive discussion of the Lucky Friday Mine prospects in its quarterly financial report for the period ending September 30, 2004. Hecla states in its press release:

"Exploration drilling to the east of the identified reserve envelope at the Lucky Friday has been excellent, extending the strike length of the vein on the 5900 level by almost 250 feet. Drilling to test the westerly strike extension of the deposit is now underway. Hecla anticipates adding additional reserves to the mine next year. Hecla is currently evaluating metallurgical improvements in the mill at the Lucky Friday unit. Preliminary results indicate excellent potential to improve metal recovery and concentrate grades, as well as some potential for additional capacity. Work will commence in the first quarter of next year [2005] to evaluate the ability of the current infrastructure to support an increased level of production above current peak capacity. The mine has been in operation for nearly 50 years and still has more reserves and resources than at most times in its history." (Hecla Press Release, Nov. 4, 2004)

EPA notes that this press release was issued after EPA proposed publicly that it did not intend to grant Lucky Friday's request for a variance on its water permit. It is apparent from its statements that Hecla is continuing to explore and make significant investments in the Lucky Friday facility despite the pending decision on its variance request.

Based on all the analysis and available information, EPA concluded there was no evidence to indicate that the Lucky Friday Mine or Hecla will incur any substantial adverse impact as a result of compliance with the water quality standard based permit. As a result of this conclusion and in accordance with the EPA Guidance as quoted earlier, there are no substantial impacts to further evaluate as to potential impacts on the community.

<u>Comment #23</u> - The Mullan School District will lose significant revenues if Hecla either proceeds with the addition pollution control investment or shuts down because it cannot afford the pollution control investment. (commenters 30, 31, 33, 34, 36)

Response:

There is no indication at this time that the Lucky Friday mine will shut down rather than comply with EPA's water quality standards based effluent permit. In fact, Hecla did not consider this issue material enough for EPA's proposed variance denial to be mentioned in its third quarter financial results that were

submitted to the SEC (Form 10-Q, filed November 9, 2004.) Instead, as discussed in response to Comment #22, Hecla pointedly described the encouraging exploration results and plans for improvements in the mill at the Lucky Friday unit.

Because it is highly unlikely that Lucky Friday will shut down in response to the permit requirement, the issue for the Mullan School District is the impact of the additional pollution control investment on Lucky Friday's property tax payment.

Included in the School District's response to EPA's public comments process to the agency's draft decision was a letter from the Shoshone County Assessor, wherein it states that "The value of the Lucky Friday Mine dropped from \$19,150,550 in 2001 to \$5,595,820 in 2004. The major factors that caused the value decrease were depressed silver prices, decreased production and limited ore reserves." (emphasis added by EPA) In its submissions to EPA, Lucky Friday indicates that it has paid property taxes, the annual amounts paid decreasing each successive year as reflected by the decreasing property values for the Mine for the 2001 - 2004 period. By the time the County Assessor's letter was written (Sept. 13, 2004), all three factors attributed by the County Assessor for the Mine' decreasing property value had reversed, e.g.: (1) silver prices had already begun a significant increase compared to earlier levels, silver prices have maintained the higher levels, and silver prices are projected by Hecla to remain at these higher levels for the foreseeable future; (2) the 5900 level drift project was definitely taking place, thereby enabling Lucky Friday to access and mine additional reserves; and (3), production at the Mine would about double, enabling production to proceed at 100 percent capacity. These current and projected conditions positively impact the three factors cited by the County Assessor regarding the Mine's value and consequently, these improvements should increase the Mine's value, thereby increasing the Mine's property taxes. It would therefore be a sound assumption that the Mine's property tax payments should increase in succeeding years above its 2003 property tax payment.

<u>Comment #24</u> - The deductibility of pollution control equipment investments will affect Lucky Friday's payments of county net profits taxes. (commenters 33, 34).

Response:

Commenters provided no specific detail on Lucky Friday Mine's historical payment of county net profits taxes. EPA's review of the CBI financial records provided by Hecla and the Lucky Friday Mine (Memorandums: Coad, Aug. 2, 2004; Feb. 10, 2005), and additional information provided by the School District and public sources, lead EPA to conclude that Lucky Friday's payments of county net profits taxes will not be substantively affected by the pollution control investment necessary to comply with the water quality standards based permit.

When looking at possible net profit tax related benefits foregone to the School District if the pollution control project is implemented, there is not a dollar-for-dollar trade-off between the additional pollution control expenditures and a reduction in the Mine's net profits. For example, starting with the annualized capital and operating costs that the Mine is projected to incur to implement the pollution control project, approximately \$1,135,350 (Exhibit 6: Coad, Aug. 2, 2004) - and assuming a federal/state marginal tax rate of 30 percent, would result in an incremental decrease in the Mine's net profits of approximately \$794,745. Applying a net profit tax rate of .003 (Idaho State Tax Commission 2004) to this amount results in an incremental net profit tax revenue impact of \$2,384. For comparative purposes, this amounts to about 0.11 percent of the School District's 2002-2003 Total Revenue and Transfers (see Exhibit 1).

Additionally, the Lucky Friday has until September 2008 to come into compliance which, as indicated in EPA's economic analysis in its public comments, allows the Mine to wait until early 2006 to begin construction, and therefore implementation of the pollution control project would not be an immediate imposition on the Mine's finances.

Exhibit 1 MULLAN SCHOOL DISTRICT #392				
School year ending June 30	2002-2003	2001-2002	2000-2001	1999-2000
REVENUE				
Taxes	405,890	358,871	451,237	433,095
Other Local	221,955	129,114	105,197	91,275
State Sources	1,247,218	1,277,313	1,180,523	1,179,394
Federal Sources	249,789	112,492	68,549	60,052
Other Sources	0	0	0	0
TOTAL REVENUE	2,124,852	1,877,790	1,805,506	1,763,816
Transfers in	13,491	15,717	19,240	16,381
TOTAL REVENUE AND TRANSFERS	2,138,343	1,893,507	1,824,746	1,780,197
Increase from prior year	12.9%	3.8%	2.5%	

Source: Idaho Department of Education, Complete Financial Summary Manuals, Combined Statement of Revenues & Expenditures with Changes in Fund Balances for Shoshone County, Mullan School District #392.

http://www.sde.state.id.us/finance/financialsum.asp

<u>Comment #25</u> - EPA's analysis relies on Hecla Mining Company financing the pollution control expenditures. Each unit of the company, such as Lucky Friday Mine, is expected to be self-sufficient and independently sustainable. (Commenter 34)

Response:

The EPA analysis evaluated the question of Lucky Friday's self-sufficiency and sustainability, using the same type of analysis performed by Hecla to determine whether it should make the investment of approximately \$8 million to increase ore reserves and production at the Mine's 5900 level. The EPA analysis indicated that even with the estimated pollution control costs, Lucky Friday would produce a more than sufficient return to justify continuing in business, remaining independently sustainable, and still able to support necessary financing costs.

The Mine's first option for financing the pollution control project is through its cash flow. If annual cash flow is insufficient to cover the Mine's capital investment costs, then Hecla could finance these costs or obtain financing from other sources (as indicated by Hecla in a July 11, 2003 letter to EPA). Hecla's own submissions indicate that historically it has financed Lucky Friday.

Table 1. Summary of Comments Received on EPA's Proposed Decision to Deny a Variance to Hecla Lucky Friday Mine, Coeur d'Alene, Idaho

Commenter #	Date Received	Name & Address of commenter	Summary of Comment
1	9/23/2004	Justin Hayes, Program Director, Idaho Conservation League, PO Box 844, Boise, Idaho 83701	Supportive of EPA's decision. ICL's analysis concludes that treatment options for Hecla's discharge are available and affordable. Remediation in the CDA Basin is progressing and the WQ and overall health of the basin is improving. Hecla's compliance w/ WQS and permit conditions would contribute to the overall improvement on WQ in the SFCDA. Hecla is a multinational mining corporation w/ assets in the hundreds of millions of dollars.Hecla reports that it will have \$111.1million in cash on hand in 2005.
2	9/29/2004	Charles E. Corsi, Regional Supervisor, Panhandle Region, 2750 Kathleen Avenue, Coeur d'Alene, ID 83815, Idaho Fish and Game.	Supportive of EPA's decision to deny Hecla's request for variances from WQS for the SF-CDA river. Granting variances would lower the water quality thoughout the CDA basin and could jeopardize improvement that have occured. Improve condition could mean increased in fishing opportunities as well as recreational opportunities for the public.
3	9/30/2004	Mike Petersen, The Lands Council, , 423 W. First Ave., Suite 240, Spokane, WA 99201	Supportive of EPA's decision. The Lands Council agrees to EPA decision. Installation of necessary wastewater treatment at the mine will reduce the levels of metals entering SF-CDA River. The ecological conditions for the existing aquatic life in the river, the native population of west-slope cutthroat trout will improve due to the improving water quality condition

Commenter #	Date Received	Name & Address of commenter	Summary of Comment
4	9/27/2004	Mike Mihelich, Kootenai Environmental Alliance, P.O. Box 1598, Coeur d'Alene, ID 83816-1598	Supportive of EPA's decision. Citing the Idaho WQS at IDAPA 58.01.02.050.02a and 02b which contains the language: Whereever attainable, surface waters of the stateThe WQS cited in IDAPA do not indicate the requested metals variances would be in compliance with a number of Idaho WQS.
5	9/27/2004	Judy Plant, E-mail: sewingfortun@msn.com ,	Supportive of EPA's decision to deny Hecla's request for variances to WQS.
6	9/27/2004	Nora J. Cooper, E-mail: njcooper@adelphia.net,	Supportive of EPA's decision to deny Hecla's request for variances to WQS. Agrees for requiring Hecla to build a WWTP at the mine in Idaho rather than dumping their pollution into SF-CDA River.
7	9/28/2004	Glida Bothwell, E-mail: glida@earthlink.net,	Supportive. Grateful for EPA's decision to deny Hecla's request.
8	9/28/2004	Laird Erman, E-mail: <u>lerman@cox-internet.com</u> ,	Supportive. Grateful for EPA's decision to deny Hecla's request.
9	9/28/2004	John Foss, E-mail: john.foss@hp.com, 5629 N. Cattail Way, Boise, ID 83714	Supportvie. Grateful for EPA's decision to deny Hecla's request. Given that Hecla has sufficient financial resources and a viable solutions at their disposal, the decision to enforce the water quality was a good one. The result will contribute to a healthier basin.
10	9/28/2004	Robert Walker, E-mail: rjwalker@neiu.edu, 900 Drake Rd., Glenview, IL 60025	Supportive of EPA's decision to deny Hecla's request for variances from WQS for the SF-CDA river. Exploitation of this type of natural resource must be controlled.
11	9/28/2004	Fred Rabe, E-mail: fredr@uidaho.edu , Professor Emeritus, University of Idaho, Moscow, ID 83843	Supportive of EPA's decision to deny Hecla's request for variances from WQS for the SF-CDA river.

Commenter #	Date Received	Name & Address of commenter	Summary of Comment
12	9/27/2004	George Alderson, E-mail: george7096@comcast.net, George & Frances Alderson, 112 Hilton Ave., Baltimore, Maryland 21228	Supportive of EPA's decision to deny Hecla's request for variances from WQS for the SF-CDA river. Responsible corporations have long recognized that compliance with water and air quality standards is an integral part of doing business, and it is part of a company's role as a good citizen.
13	9/27/2004	Robert Vestal, E-mail: rvestal@mindspring.com , Robert E. Vestal, MD, 3475 W. Breneman, St., Boise, Idaho 83703-5559	Supportive of EPA's decision to deny Hecla's request for variances from WQS for the SF-CDA river. Hecla has plenty of money to construct the necessary WWTP in order to protect the SF-CDA river and the downstream waer system.
14	9/27/2004	Robert C. Rogero, E-mail: rcrogero@aol.com, 12678 Deer Ridge Trail, Nampa, ID 83686	Supportive of EPA's decision to deny Hecla's request for variances from WQS for the SF-CDA river. As a shareholder, expects management to operate the company in a profitable manner. At the same time management is responsible to protect the environment, and not pollute unnecessarilly.
15	9/20/2004	Rocky Hill, President, Silver Valley Community Resource Center, P.O. Box 362, Kellogg, ID 83837	Supportive of EPA's decision to deny Hecla's request for variances from WQS for the SF -CDA River. Silver Valley's concern are the discharge limits pertaining to the Hecla's NPDES permits pertaining to lead, cadmium, and zinc stds.
16	9/13/2004	Thomas J. Kane, 745 N. 3 rd Street, Coeur d'Alene, ID 83814	Supportive of EPA's decision. Opposed to granting Hecla a variance. Concern about the pollution in the area.
17	8/19/2004	Sharon & David Seitz, (Coeur d'Alene, ID) e-mail: idsophie@adelphia.net	Supportive of EPA's decision. Do not allow Hecla to release more metals to the SF-CDA River which flows into CDA Lake that is already polluted.

Commenter #	Date Received	Name & Address of commenter	Summary of Comment
18	8/19/2004	Iris J. Byrne, E-mail: <u>ijbyrne@imbris.com</u>	Supportive of EPA's decision. Through research and experience in working w/ political campaigns and attending mtgs organized network of people w/ mining interest (Natural Res., Coalition) pretend to represent community. Be aware of the extent of their network.
19	8/20/2004	Al Espinosa, Fisheries Scientist, 735 Vista Street, Moscow, ID 83843, E-mail: spinedog@adelphia.net	Supportive of EPA's decision to deny Company's request for a variance. Company must not be allowed to discharge more heavy metals in th SF-CDA River. CDA basin and its resources have suffered enough pollution and degradation.
20	8/25/2004	Brad & Deb Holmes, E-mail: holmes0801@usamedia.tv	Supportive of EPA's decision to deny Hecla the request for variance. Preventing the company to dump metals into river.
21	8/30/2004	Frank & Cecilia Walls, 6 W 27 th Avenue, Spokane, WA 99203-1848	Supportive of EPA's decision denial of variance from WQS. Mining companies had ample time to improve the WQ but failed to do so.
22	8/27/2004	Gary Passmore, E-mail: gary.passmore@colvilletribes.com	Supportive of EPA's decision to deny Hecla's request for variances from WQS for the SF-CDA River, Sediment analysis performed by USGS has documented that metal contaminants from CDA WS are working their way down the Spokane Rvr into the Col River (Lake Roosevelt) part of which is on the Colville Indian Reservation. WS contamination must be controlled from the top down, not visa versa. EPA's Indian Policy recognizes the federal govt's responsibility to protect land, water, and air resources held in trust for Indian tribes.

Commenter #	Date Received	Name & Address of commenter	Summary of Comment
23	8/29/2004	Anne Salisbury, 620 Ridge Road, Moscow, ID 83843	Supportive of EPA's decision. Strongly feel that Hecla not be granted the variance. To continue to pollute our water even though it has been polluted in the past, would have greater economic and social impact that consequences borne by Hecla in complying with the protection laws.
24	10/08/2004	Valerie Chamberlain	Supportive of EPA's decision. Cadmium and lead are dangerous to humans and zinc is unhealthy for fish. Please continue your good work of cleaning up our waterways.
25	9/08/2004	Kennth & Joann Branstetter, E-mail: jokenb@imbris.net	Opposed to EPA's decison. Request for Public Hearing. Concerned that EPA is planning to spend millions of \$\$\$ cleaning up something that does not need cleaning. Commenter thinks we are putting the Valley down instead of helping the Valley to comeback to life.
26	9/9/2004	Rose M. Zieja, P.O. Box 863, Osburn, ID 83849-0863	Opposed to EPA's decision to deny Hecla the request for variances from cadmium, lead, and zinc. Concerned that the amount of pollutant discharged (Zinc) into the SF by Lucky Friday and Galena is minute (1.3#) compared to what is dumped by the Central Impoundment Area of the Bunker Hill site) 1400#) operated by the agency.
27	9/01/2004	Ray Yount	Opposed to EPA's decision. Concern of financial impact to the company and community. (The EPA has skipped over CDA Lake's problems, and almost considers it virgin waters. What a bunch of self-serving hooey.
28	9/01/2004	Vinetta R. Spencer, 99 Green St., Kingston, ID 83839	Opposed to EPA's decision. Concern where the figures and the science that supports the Agency's decision. Decision need to be based on real needs and logical thinking.

Commenter #	Date Received	Name & Address of commenter	Summary of Comment
29	8/21/2004	Jim Hollingsworth, 3130 Cherry Lane, Coeur d'Alene, ID 83815, E-mail: jimhollingsworth@abcinet.net	Opposed to EPA's decision. Hecla should be granted a variance. Concern that if it becomes harder and harder to mine. They will have no mines in Idaho. EPA must be careful what to require of the mining companies that still exist in Idaho.
30	8/25/2004	Robin Stanley, Box 268 Silverton, ID 83867	Opposed to EPA's decision. Concerned about the impact of EPA's decision to deny a variance to Hecla. The economic impact of reallocation of Lucky Fridays resources will have in the infrastructures of the community. Due to economy's hardship from previous EPA lawsuits, threat of lawsuits and environmental regs hanging over the primary industry.
31	9/28/2004	Robin Stanley, Facilitator, Shoshone Natural Resource Coalition, P.O. Box 1027, Wallace, ID 83873.	Opposed to the Agency's decision; requesting for reconsideration to allow the Company and the communities of Shoshone County the opportunity to recover from the past twenty years of economic depression, and additional time to develop the resources necessary to address the clean water issues without further exacerbating the tax shift issue in Shoshone County.
32	9/17/2004	Lisa Carney, P.O. Box 93, Cataldo, ID 83810	Opposed to the Agency's decision; to demand improvements go beyond reasonable and extend to the point of unreasonable financial expenditures and threaten the existence of the company.
33	9/13/2004	Doug Jutila, Chairman, Mullan School Dist., Board of Trustees, P.O. Box 71, Mullan, ID 83846.	Opposed to the Agency's decision. The fiscal impact this standard will create at the Mullan School Dist., and the community.
34	9/29/2004	Mike Dexter, General Manager, Lucky Friday Mine.	Oppposed to Agency's decision. Numerous concerns raised over a number of different issues.
35	10/11/2004	Bonita Erickson, Clerk, Mullan School Dist., re Lucky Fridays Market Value.	Opposed to EPA's decision. Lucky Friday Market Value, Tax Levies for School Purposes,

Commenter #	Date Received	Name & Address of commenter	Summary of Comment
36	9/28/2004	Harry Cougher, VP/GM Coeur Silver Valley, Inc.,	Opposed to the Agency's decision; the timing of EPA response; relationship of operating units; relationship to Superfund record of decision.
37	9/18/2004	Harry & Mary Winkler, P.O. Box 632, Pinehurst, ID 83850	Oppposed to EPA's decision. Suggest EPA provide a 5-yr extension on the variances. Concerned on both economy and environment.
38	9/13/2004	Berniece Rife, Box 147, Silverton, ID 83867	Opposed to EPA's decision. Request for a Public Hearing. Would like to get the mine in full production, concern about the Economic Benefit.

References

Coad, G. 2004. Memorandum from Gail Coad, Industrial Economics, Inc., to Lisa Macchio, U.S. EPA Region 10. August 2, 2004.

Coad, G. 2005. Memorandum from Gail Coad, Industrial Economics, Inc., to Lisa Macchio, U.S. EPA Region 10. February 10, 2005.

Expert Report of Dudley W. Reiser, Ph.D. Aug. 31, 1999. Unpublished report in docket for UNITED STATES of America, Plaintiff v. Asarco Incorportated, et al. No. 96-10122-N-EJL and Case No. 91-9342-N-EJL, 1999 WL 33313132.

Hecla Press Release. November 2004. "Hecla Releases Third Quarter Financial Results, Advances Exploration and Development Projects", November 4, 2004, Business Wire.

Hecla Mining Company. Form 10-Q, for the period ended September 30, 2004. Filed with the U.S. Securities and Exchange Commission on November 9, 2004.

Idaho Tax Commission. 2004 (December 14). Boise, Idaho. Personal communication between Allen Dornfest and Elliot Rosenberg, EPA.

U.S. EPA. 1994. Water Quality Standards Handbook, Second Edition, EPA-823-B-94-005a. August 1994.

U.S. EPA. 2003. Letter from EPA to Hecla, February 3, 2003.

U.S. EPA 2004. Decision Document, August 12, 2004. The U.S. Environmental Protection Agency, Proposes to Deny a Request for a Variance to Water Quality Standards for the discharge of metals from the Hecla Lucky Friday Mine.

U.S. EPA. 2005. Memorandum from Elliot Rosenberg to Lisa Macchio, Subject: Hecla Lucky Friday Mine: Response to Mullan School District's Assertion, re: Net Profits Tax Reductions, March 2, 2005